

SE0040

ABSTRACT

Security processing circuits are discussed which may be used alone or as part of a network interface device of a host system using a single DES engine to accomplish 3DES processing. The security processing circuit is adapted for selectively encrypting outgoing
5 data and decrypting incoming data, where the network interface device may be fabricated as a single integrated circuit chip. Methods are also provided for performing 3DES encryption and decryption services between the host system and a network, in which security information is obtained from the host system, which is used together with a set of secret keys for 3DES processing data utilizing a single DES engine and an intermediate
10 result fed back to the single DES engine of the 3DES IPsec circuit.